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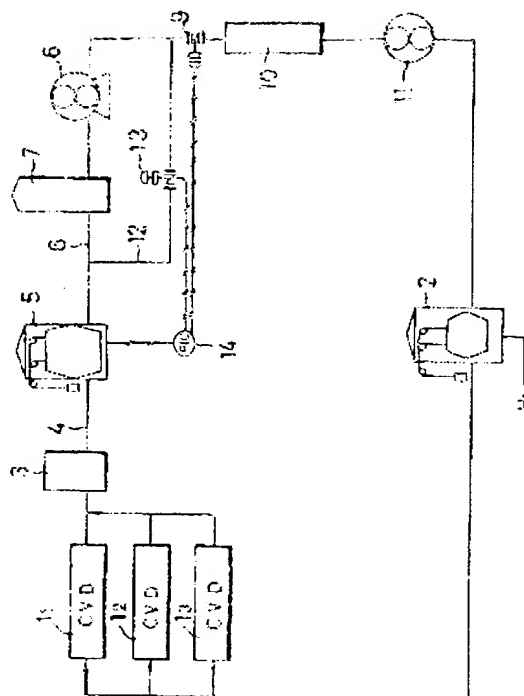
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TITLE : DEVICE FOR RECOVERING WASTE  
GASEOUS HYDROGEN FOR CVD  
FURNACE



ABSTRACT : PURPOSE: To recover gaseous hydrogen without fluctuating the pressure in a CVD furnace with a device for recovering waste gaseous hydrogen by providing a stop valve between a suction pump and a refining and providing a bypass stop valve to the suction pump.

CONSTITUTION: The pressure in pipings 4, 6 drops when a feed valve and a discharge valve are closed upon ending of a vapor growth process in a CVD furnace 1<sub>1</sub>. When a sensor attached to a pressure regulator 5 senses a pressure drop, a pressure indicating controller 14 throttles the opening degree of a stop valve 9 and opens a bypass stop valve 13 allowing the greater part of the waste gas to circulate through an impurity remover 7, a suction pump 8 and the valve 13. The pressure drop between the position where the piping 6 and a bypass piping 12 are connected and the CVD furnaces 1<sub>1</sub>, 1<sub>1</sub>, 1<sub>3</sub> is thus made slight. Even if the feed valve and discharge valve for operating the succeeding furnace 1<sub>2</sub> are opened, the abrupt fluctuation of the pressure in the furnace 1<sub>2</sub> is prevented and the gaseous hydrogen is recovered without decreasing the yield of a semiconductor product.

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